

## Comments of SunEdison LLC

08-IEP-1B

2008 integrated Energy Policy Report Update

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### Introduction

SunEdison<sup>1</sup> appreciates the opportunity to provide comments to the California Energy Commission (CEC) on the 2008 Integrated Energy Policy Report Update (2008 IEPR Update). As Chairman Pfannenstiel noted in her opening remarks at the August 21<sup>st</sup> workshop, “Achieving Higher Levels of Renewables in California’s Electricity System”, California can and should set the target for the renewable portfolio standard (RPS) at 33% of utility sales. The focus for regulators, utilities and market participants should be on how to overcome the barriers to achieving this goal.

As a solar services provider, SunEdison limits these comments to observations from the August 21<sup>st</sup> workshop and the role that photovoltaic solar (PV) can play in reaching the 33% RPS goal. SunEdison is concerned that the lack of electric transmission will remain a significant barrier to the development of essential renewable generation. Improvements must be made in the way that public utilities, investor owned utilities (IOUs) and the California Independent System Operator (CAISO) plan and jointly build transmission facilities. In the meantime, SunEdison would like to draw the CEC’s attention to a recently issued draft report in the Renewable Energy Transmission Initiative (RETI) that has identified the potential for 27,500 megawatts of PV that can be sited adjacent to existing electric substations without the building of transmission lines. The CEC should quickly conduct a study to evaluate this substation-sited renewable generation, as well as other distributed renewable generation technologies, and identify market mechanisms to quickly realize its potential.

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<sup>1</sup> SunEdison LLC is a solar systems integrator and installer serving commercial, utility and government clients. For more information about SunEdison please see our website at [www.sunedison.com](http://www.sunedison.com).

## Comments

According to the CEC's RPS Contract Database<sup>2</sup>, updated as of July, 2008, only 8% of IOU contracted renewable capacity is actually on-line. Workshop participants attributed the low performance to development delays caused in large part by lack of transmission and permitting problems, as well as other factors.

During the August 21<sup>st</sup> roundtable discussion on transmission, it was clear from the statements of utility participants and the CAISO that there are no simple fixes to streamline California's transmission planning and siting processes. Decades-long rivalries between publicly owned and investor owned utilities continue to play out in front of the Federal Energy Regulatory Commission (FERC), delaying the development of transmission. Pre-arranged settlements between parties covering access, operations and cost recovery may be the only way that transmission can be approved and built in a timely fashion. Although the CEC has no limited direct jurisdiction over California's publicly owned utilities and IOUs, a joint effort between the CEC, FERC and the California Public Utilities Commission (CPUC) to periodically review progress towards transmission planning and settlement of cases might encourage parties to make the necessary compromises.

One of the bright spots in the discussion came from the comments of Greenvolts who noted that a recently released study in the RETI process has identified a significant amount of PV that can be developed without building transmission lines. Table 1-1 from the Draft Phase 1B Resource Report<sup>3</sup> identifies 27,500 megawatts of potential PV generation. Based on proxy projects of 20 megawatts ac (MWe) located adjacent to substations, the report notes

“Potential photovoltaic resources are much larger than shown in this table (and evaluated in this report). The table just includes the potential for enough smaller 20 MW projects needed to satisfy the RPS requirements. Additional solar

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<sup>2</sup> [http://www.energy.ca.gov/portfolio/contracts\\_database.html](http://www.energy.ca.gov/portfolio/contracts_database.html); see “Operational Status Summary” tab.

<sup>3</sup> See: <http://www.energy.ca.gov/reli/> Renewable Energy Transmission Initiative (RETI) Phase 1B – DRAFT Resource Report, August 16, 2008.

PV resources, including large scale 150 MW projects, and distributed, retail-scale, are not quantified here.<sup>4</sup>

Distributed renewable generation is not a complete solution for meeting California's RPS goals. It should be noted, however, that PV is an established and easily-deployed technology whose cost continues to decline as worldwide production volumes continue to increase. The 27,500 MWe identified in the report represent projects of a size that are already common in Europe and increasingly so in the United States<sup>5</sup>.

At the beginning of the August 21<sup>st</sup> workshop, Commissioner Byron stated that one of the CEC's goals was to identify additional studies that could be done to better understand how to accommodate increased levels of renewable generation. SunEdison respectfully suggests that this 27,500 MWe of PV generation represents an opportunity to align several CEC efforts and quickly bring significant amounts of renewable, on-peak generation on-line. In addition to its work on the IEPR and achieving 33% renewables, the CEC has also examined market mechanisms, such as feed-in tariffs, that would encourage the rapid development of renewable distributed generation. A joint workshop with the CPUC and CAISO should be held to focus on quickly and cost-effectively developing substation-sited renewable generation that supports the transmission grid.

### Conclusion

SunEdison appreciates the opportunity to comment and applauds the CEC's efforts to chart a course towards increased renewable electric generation. There is no single renewable generation technology that can completely fulfill California's needs, nor is there a quick solution to the challenges of building environmentally sound infrastructure in our heavily populated state. There is, however, an opportunity to make significant progress towards California's RPS goals through the development of distributed solar generation while continuing efforts on other fronts.

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<sup>4</sup> Ibid, p.1-2

<sup>5</sup> See: <http://www.duke-energy.com/news/releases/2008052101.asp?sec=content> and <http://investors.sunpowercorp.com/releasedetail.cfm?ReleaseID=320627>.